AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICE CURRENT.

" *O fortunatos nimium sua si bona norint*
" *Agricolas.*" . . . . . VIRG.

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AGRICULTURE.

ADDRESS,

Delivered by JAMES M. GARNETT, President of the Agricultural Society of Fredericksburg, Va.—May, 1821.

GENTLEMEN,

The circumstance of our Society's not meeting in November last, although to be regretted on several accounts, will be productive, I hope, of at least one advantage. All those who were disposed to comply with the excellent resolution offered twelve months ago, by one of our Committee of Correspondence, having had ample time to prepare their reports, will be now ready, we trust, to make them. Had these reports been called for in November, if certain tales which I have heard whispered about be true, many of them would have contained little else, but an acknowledgement that their authors " had left undone several of those things which they ought to have done ;" for as the stories go, a considerable portion of the autumn's work was not completed, until very late in the past winter. Whether these insinuations have any foundation in fact, I cannot take upon me to affirm, however strong may be the suspicions of some, that they are not entirely groundless. Still I thought it my duty to mention them, that our members may be apprised how closely all their proceedings are watched, in consequence of their union with an Agricultural Society, by some of those who will take no part with us. But May day is now passed, and I therefore confidently trust, that most of us will be prepared, not only to say something of our transactions during the preceding year ; but to speak of the work belonging to 1820, as long since finished. Memoranda of this kind should be kept by every member of our Society ; and if it were considered a part of our duty, annually to exhibit such portions of them as contained particulars which we might deem worth noticing, we should certainly advance our *own* knowledge and practice, if we did not materially improve *that of others*. In this way we should collect a sufficient number of facts, in regard not only to the culture and management of every variety of crop ; but also in relation to the management of every kind of stock, to enable us to judge which was the best practice with respect to each. We should not then be left, as at present, to form our systems from a few solitary cases detailed in newspapers, which cases should be looked upon in most instances, as exceptions, rather than rules. It is true that there is now a good Agricultural Paper accessible to us all—I mean the " American Farmer" ; which by the time that it has been in operation for a year or two more, under the management of its present very zealous and intelligent Editor, will probably present an excellent system of every kind of American husbandry. At present we have no such thing ; the European books, valuable as they certainly are, containing not much that is applicable, without considerable variation, to *our* soils, climates and situations. The consequence is, that every agriculturist has a distinct plan of his own, producing endless confusion, incertitude, and wasteful misapplication of labour. On this account it behoves us, as Virginia Agriculturists especially, to pursue steadily, the golden mean between too much, and too little decision and action, so well expressed in that paradoxical apothegm—" make haste slowly." Among the innumerable wise saws and maxims transmitted by our pains-taking forefathers to enlighten our ignorance, and guard us against evil, I do not recollect one of more general application ; not one more generally disregarded ; nor any that would do us more service, were we to practice it as we ought. There is no trade, profession, or calling, but might derive great advantage from making it the rule of its conduct ; for all that was then gained either in theoretical knowledge or practical skill, would be an advance towards the highest attainable perfection, secure against error, or retrogradation. Yet if there is one occupation which would be more especially benefitted by adopting this maxim, than any other, it is that of the agriculturist ; because there are none in which hasty conclusions are more prejudicial ; none wherein partial, inaccurate experiments lead both the performers, and their followers to more erroneous opinions ; nor any wherein such experiments prove more pernicious obstacles to the regular progress of sound theory and practice. To what other cause can we possibly attribute the numerous changes so frequently occurring in both ? How else can we account for the various conflicting systems in this most ancient of all arts ? Or in what other way shall we be able to explain the little ground which has been gained among us, in the true knowledge and understanding of all the different processes in husbandry, and of the best methods of practising them ? Experiment, the proper test of every opinion, can lead only to errror and confusion, unless it be frequently repeated, and always under circumstances as nearly alike as possible. Yet notwithstanding this fact is one of the first things forced upon us, after laying aside the petticoats of our infancy, how often do we see the most positive, and extensively applicable conclusions drawn from a single trial ; or perhaps from two or three ill-defined experiments, carelessly made, and in which many of the most important particulars are not mentioned at all ; or marked in such a way, as to leave us altogether in the dark respecting the all-essential fact of exact similitude in every circumstance. In many of these cases too, deemed sufficient to be the foundation, at least of new practices—if not of entirely new systems, the experimenter's opinions have *preceded* the facts upon which alone they ought to be founded : and we all know in such situations how easy and natural it is to make the result conform to the pre-conceived notion of what it ought to be. Thus one will tell you of some single trial that he has made, from which he draws this sweeping conclusion ; " it warrants an opinion that *he has long entertained* ;" but he will probably describe this experiment so loosely, as to render it impossible for you to distinguish between what is stated for matter of fact, and what for matter of opinion. Another will give you in very ambiguous terms, the result perhaps of two or three trials, evidently made, rather to confirm some pre-existing fancy, than in the true spirit of an impartial enquirer ; and will immediately begin to build a system upon this very slender basis. This is literally the inverse of all true methods of philosophising ; and has always proved a more prolific source of error, than any other cause whatever. Were no opinion which is to govern our practice, adopted conclusively, until it was sanctioned by a long course of well defined and and most accurately tried experiments ; although we might not at first view appear to advance so fast, as we should in reality make infinitely greater progress in all useful knowledge, than we do : and what would be better still, our progress would be secure against all the mischievous errors of innovators, projectors, and visionary theorists.

Another great obstacle to our attainments in agricultural knowledge, but of a nature quite opposite to the habit of forming hasty conclusions from loosely made experiments of our own, is the obstinate incredulity often manifested by us in regard to the experiments of others. These are slowly imitated, even where they succeed immediately under our own eyes ; but if followed by all, it is too often with some fantastic variation of our own contrivance. This probably produces a failure. The trial is then christened " Mr. such a one's method," and is condemned off hand before the public, without any explanation of our own interpolations, which if fairly stated, might prove that the failure was owing to some attempted " *improvement*" (as it was designed to be,) of a conceived Bungler. Thus it fares with numerous *real improvements* for years after they have been successfully practised by the inventors. The case is still more hopeless where we have to gather agricultural knowledge from publications of any kind. If they are in manuscript, we view them with a very knowing suspicion and jealousy : but should they happen to be in " your print hand," which even Tony Lumpkin preferred as a source of information, they are all pronounced " theoretical" and " visionary :" nor will one syllable of the matter be believed or regarded. Thus, between the precipitancy with which we confide our own crude, hasty, and illy defined experiments ; and the dogged incredulity which we oppose to all experiments made by other people ; we either take for granted what remains to be proved—thereby involving ourselves in numberless losses and disappointments ; or continue to the end of our lives in the old beaten track which has been faithfully pursued by many of us from the times of our great, great, great grand-fathers. The man who means to succeed in agriculture, or indeed in any thing else, should be always open to conviction, and ever hold himself in readiness to give a fair and accurate trial to all sorts of experiments holding out a rational promise of success ; taking care at the same time, not to hazard more labour or money in making them, than a sound discretion will justify.

In addition to the foregoing permanent obstacles to the acquirement of knowledge in all the branches of rural economy, we have to encounter one, at present, which although of a temporary nature, will infallibly prove very detrimental, so long as it lasts. This circumstance entitles it to our serious consideration. Because " we have fallen upon evil times," or rather because evil times have fallen upon us, we hear many of our Brethren exclaim : " it is not worth while to make crops, we can get nothing for them ;" —" neither is it any object to improve our lands." This is moody madness, or sheer folly. What, because a sudden change has occurred in a state of things, during which the profits of all kinds of occupations were so enormous, that there was imminent danger of the whole nation's becoming a set of speculators and gamblers ; shall the followers of that particular occupation upon which all others unavoidably depend ; and without which indeed, none could exist—shall *they*, when the medicine is applied, that alone can bring us to our senses, be among the first to despair of their situation ? God forbid : for the honor of our profession—for the welfare and happiness of the nation, let us hear no more of a sentiment which, neither the peculiar circumstances of the case, nor any just views of life can palliate or excuse. It is certainly true, that our progress towards independence and wealth, must be by much more tardy steps than formerly ; but the chief difference is, that we must now be content to *walk slowly*, instead of rushing on at the top of our speed. Our road is still the same ; the goal at which we aim, not changed ; but the facilities of travelling, the pleasures of the journey, and the pageantries of its termination are considerably diminished. We have fewer flowers to cull by the way ; and not quite as many junketing houses at which to regale ourselves.

Still if we can be satisfied to "make haste slowly," we shall assuredly reap our reward if Government will let us alone. Have we any thing to expend on our land? There never was a time, when the funds devoted to this object, would purchase more labour and other means, than at present. Do our debts forbid such an application of our finances? There never was a period, when exertion was more necessary to pay them. Hence both the agriculturists who owe money, and those who have it to spare, will find in the circumstances of the times if they view them as they ought, abundant reason for augmented industry, and assiduous application in pursuing their professional labours. Let us only go on at a steady, indefatigable, and sure pace, and we *must* succeed, if any occupations in the community do.

There is yet another sore evil in our course, constituting no small impediment to real improvement. But being of a character somewhat ludicrous, I am almost afraid to mention it, lest some may deem it derogatory to the dignity of our calling. Believing however, that it is not peculiar to our profession, as some sage satirist has long ago remarked, that "men are but children of a larger growth;" and thinking also, that some benefit may result from an attempt to expose it, I shall venture a few remarks on this topick. The evil to which I allude, is our passion for Hobby Horses. One while they were all Merino Rams, often ridden—Pepin and Breschard-like, two or three at a time. Then came up the fashion to make hobbies of Mammoth Bullocks; of Alderney, Devon, Teeswater, or Holderness Cows; of enormous Hogs, utterly unfit for any purpose but making soap, or levying a tax upon idle curiosity; and ever and anon, huge Ruta Baga and Mangle Wurtzel Roots, supplied the place of the canes and sticks of our childhood. Upon some one, or all of these highly pampered coursers in turn, we have been for years past, prancing delightedly and proudly, through all the news-papers in the United States, to the great wonderment and delight of all beholders. This would all be very well—for a ride on a favorite hobby is often far more pleasant, than one on a real horse; if too much of the general and more important business of our farms had not, in many instances, been sacrificed to the indulgence of these fancies. The whistles have been to dearly paid for; and no substantial improvement has been made in the various branches of our rural economy; commensurate to the extravagant expectations raised in the public mind by these agricultural pageants.* Much undoubtedly, has been done; and advantages, great and extensive, have been gained by the increased zeal, intelligence and industry with which agriculture has been, and is pursued in almost every part of the United States. But I am thoroughly persuaded, that our progress would have been still greater, except for the fascination of the aforesaid hobbies; many of which have proved so vastly tempting, that very few, even of the gravest among us, have been able to resist the inclination to take a ride. The discovery that much extra feeding, and extra culture, would make both plants and animals considerably larger than those individuals of their respective species upon whom this superogatory care had not been bestowed, is not, I fear, one of the merits of the 19th century. But I believe we may justly claim all the praise, if any be due, for ascertaining that individual and rare excess of dimensions, either in animals or plants, can prove a general benefit to the cause of American husbandry. Should monsters in the vegetable and animal kingdoms become common, they will cease to be monsters: and being no longer rare, both the honor and the profit of owning and exhibiting them, must of course be at an end. But unless they do become common, where is the general benefit in their existence? That such things neither can be general, nor answer the purpose of food either for man or beast, so well as plants and animals of inferior magnitude, is universally admitted. Why then, should premiums and other rural honors be bestowed to encourage this unnatural whim? To expend money thus, is little better than throwing it into the sea. In short, we may venture to lay it down as a principle, without exception, *that all premiums having a tendency to render tillage and pasturage more showy than useful, directly retard, rather than advance the true interests of agriculture.* Every land owner may do something towards bringing these two great sources of individual and national prosperity to their highest attainable state of profit; but every land owner cannot be either the possessor or showman of agricultural rarities. All rewards therefore, which are offered with a view to promote the cause of agriculture, should be regulated solely by the principle of encouraging nothing but what may tend permanently to increase the general profits of those who devote themselves to the particular branches of husbandry best adapted to the circumstances of the country wherein such rewards are proclaimed.

Among the few causes of felicitation, which present themselves to us agriculturists at this time, I cannot omit to mention the second failure of the Tariff project; upon which I cordially repeat my congratulations, notwithstanding it may bring upon me, as it did last Spring, no small degree of newspaper obloquy. That I should so frequently recur to this subject, will not, I hope, be thought unnecessary or irrelevant, so long as it continues to hang over our heads like a portentous cloud, threatening to blast or sweep away all the fruits of our industry. The basis of this ruinous scheme, is neither more nor less, than a power claimed by its advocates, for Congress to create and foster any one or more occupations in society, at the expense of all the rest, without any other limitation in regard either to the means or the measure, but the sovereign will and pleasure of the national legislature. This power *must* be exercised to a great extent, or I venture to assert, that the boon so earnestly required, can never be granted. Each increase of duties has at first been pronounced sufficient; yet, very soon, duties still higher have been asked. It is to no purpose, that the friends of the measure disavow any wish or intention of pushing it to extremes. Such disavowal furnishes no valid security against congressional abuses in this particular case. Without the smallest intent to arraign any man's motives, I must take the liberty here to remark, that no legislator, I believe, since the creation of the world, has ever yet had the folly to preface any project, however pernicious its tendency might be, with a declaration that *he designed it to do mischief;* still history furnishes us with abundant instances of highly mischievous legislation. The kind and affectionate style, therefore, adopted towards us in the late Report of the Committee of Manufactures, which I presume we are to consider a complete expose, both of the motives and purposes of the manufacturers, is but poor compensation to us, for the scheme, which this style is intended to recommend. Indeed, when I contrast the sugared words of the author, with the bitter potation that he aims to make us swallow, I am forcibly reminded of a remarkably severe old farmer, whom I once knew, whose very worst flagellations of his servants were always accompanied (as it was said) by the prelusive address of "my dear Honey." And this truly tender salutation ever inspired far more terror and dismay in the unhappy objects of it, than his most angry curses and reviling; for from the last, they often escaped without corporal punishment; but from the first, they never did.

If the author of this report really feels the affection for us which he professes, I sincerely wish he could think of some better way to shew it, at the next session of Congress; for, should he succeed in his present scheme, his friendship will be not less pernicious to us, than his most violent enmity. He may then, very well apply to *us*, the language which Swift makes Judge Whitshed apply to his tenants:

"They swear I am so kind and good,
I hug them till I squeeze their blood."

Relying upon the strenuous regard which the author (whoever he is) of the Report from the Committee of Manufactures so energetically professes for us all, I will take this occasion to make an humble request on behalf of the whole body of Southern agriculturists, which, being very moderate in its nature, and entirely legitimate in its object, I confidently hope he will grant. It is, that he will read, before December next, and endeavour to persuade his tariff friends to do the same, a certain small pamphlet, lately published in New-York, entitled "An Examination of the New Tariff, proposed by the Honorable Henry Baldwin, a representative in Congress. By One of the People." *If, after this,* they should *still* retain their partiality for this tariff, I, for one, shall be ready to acknowledge, that they are made of far more impenetrable stuff than I had imagined. It has rarely been my fortune to meet with a more complete refutation of any thing, than this pamphlet contains of the Tariff project; and I am thoroughly persuaded, that were it generally circulated, it would convince every man, who is open to conviction.

Connected with this subject, there is a curious fact in regard to the last law for taking the Census which I take the liberty to notice here, as I do not recollect seeing it noticed elsewhere. Although many attempts were made to ingraft in that law certain provisions for the purpose of ascertaining various statistical facts, which have been deemed so important, I believe, in every other civilized country, as to be matters of legal regulation in all, not one succeeded, but that which secured a fuller enumeration of the manufacturers, than of either of the other classes. For a distinct designation of this class, an additional fee was allowed; the consequence of which has been, that several farmers of my acquaintance have had considerable difficulty in prevailing on the census-takers not to rank them, together with all their negroes, as manufacturers; because occasionally, in bad weather, and in the case of women with young children, they were occupied, at times, in house hold manufactures. That the same thing has happened to many other agriculturists, I have not the least doubt. Why such an inducement should be held out by the law, to swell the aggregate of the manufacturing class beyond its just dimensions, I cannot well conceive; unless it is, that in future applications to Congress, the relative proportion of that class to the rest of our population may be made out much greater than it really is, by including, in one undistinguished mass, not only all those who carry on public manufactories, but likewise all who are occasionally engaged in the household and family way, and representing them in the aggregate as suffering for the want of that kind of government *protection* (as it is called) which consists in making all the other occupations of society pay more for what they buy, than they formerly did. In regard to Virginia, and I believe I might add the Carolinas and Georgia, as well as all the other Southern and Western states, I do not believe one ten-thousandth part of those, who in the new census table will be designated manufacturers, are of that description, who would ask for additional duties on foreign goods. Yet I have no doubt, that in the next Tariff pamphlet which comes out after the census, we shall see them all marshalled numerically on the side of the petitioners, for augmented imposts. Aware that such a game *might be played*, although I have no wish to accuse those who made the law of any such design, I have been at some pains to furnish myself with facts, by which to ascertain the probable amount of those individuals in my own state, who would be classed as manufacturers, solely in consequence of their being occasionally engaged in household manufactures. But an account of the principal articles which they thus produced, being more attainable than the number of persons occupied in producing them, by temporary and irregular labour thus applied, I prevailed on the individual who took the census in my own county—a gentleman entirely to be relied upon, to procure from each family an account of what they manufactured within themselves, of the four articles in most common use—to wit: woollen and cotton cloth, stockings and shirts. The

* *See some excellent observations applicable to this subject by Dr. Mease, 'on the late Cattle Procession in Philadelphia,' published in the American Farmer, on the 13th of April.*

result was, that in a population of only nine thousand nine hundred and nine souls, there were made within a year—

Pairs of Stockings, - - - -	6216
Do of Shoes, - - - - - -	5496
Yards of Cotton Cloth, - - -	65177
Do. of Woollen do. - - -	14718

To this estimate, the gentleman assured me that he was confident one-fourth might safely be added, as he had commenced taking the census for some days before he began this business, and several refused to give him any account. But I prefer being under, rather than over, the true amount in the following calculation If the county of Essex may be supposed to furnish, as I think it does, an average, certainly short of the true one for the whole state, both in regard to population, and the amount of household manufactures, such as are enumerated above; then, as we have, besides 4 boroughs, 104 counties in the whole state, the aggregate amount of the above articles may safely be stated as follows:

Pairs of Stockings, - - -	646,464
Do. of Shoes, - - - - -	571,584
Yards of Cotton Cloth, - -	6,778,408
Do. of Woollen do.	

Thus extensively, have the duties already existing, compelled us who belong to what are called "*the non-manufacturing states,*" to manufacture for ourselves, as a matter of necessity, rather than choice, in regard to a large portion of the specified articles. And should these duties be raised still higher, thereby inevitably diminishing still farther our capacity to buy either foreign or domestic manufactures, we shall not be long with wheat at one-half, and corn at one-fourth of former prices, in getting to that enviable state of primitive simplicity and independence, when every man must become his own artificer—one of the chief advantages of the social state—I mean *the division of labour*, being entirely lost to us by a system of policy to which it appears, in my humble judgment, that nothing but sheer fatuity or madness can ever cause the American people to submit

In whatever way this great question may finally be setted, it is most earnestly to be hoped, that it will be one of the first subjects acted upon at the next session of Congress; for almost any thing would be preferable to the present suspense, which in a great degree paralizes every branch of national industry, but especially agriculture and commerce; the last of which, both foreign and domestic, is as essential to give healthful activity to the first, as the action of the heart is, to circulate the life-blood of the human body. If we can consent to learn from that nation, whose example in regard to commercial restrictions, a portion of us have recently been so anxious to imitate, we shall soon be thoroughly satisfied that the diminution of duties already high, will always augment the public revenue, by increasing both exportation and importation: and hence, that a policy exactly opposite to the one which so many of us wish to be pursued, should be adopted without further delay. Let the scale of our duties be lowered rather than raised; and, then let it be permanently fixed, that those, who are most liable to be affected by their frequent fluctuations, may know what to be at. A greater portion of American capital is now lying dead to every useful purpose, than ever was placed in the same situation before It is true, that some external causes, beyond our reach, contribute to produce this state of things; but the chief evil lies at our own doors, created by ourselves, and still pertinaciously continued, although removable at pleasure This consists in numerous embarrassing commercial restrictions, miscalled regulations; aggravated by a threatened augmentation of more than two years duration, pending which our capitalists have been afraid to invest their money in any thing that could be materially affected by *that* increase of the existing duties which has been not only petitioned for, as a favour, but demanded, as a right.

How far, gentlemen, you may deem the foregoing remarks, in regard to the legislative injuries with which our interests are still threatened, relevant to the nature of such communications as your presiding officer is expected to make, I cannot take upon me to say. But thinking, as I do, that such of our difficulties and embarrassments, as arise from legislation, are not less worthy of examination, than those which we ourselves have the power in a great measure to remove, I hope to be pardoned for adverting to them, as I have done. The free and public discussion of all topics immediately affecting our rights and interests, has ever appeared to me one of the most useful purposes to which Agricultural Societies could turn their attention. It can never do harm, but may produce much good, if the sole object be, as you may rest assured mine is, to attain truth in relation to every thing which concerns us. That we are most deeply concerned in all laws directly bearing on agriculture, none can deny What better way, then can we pursue, in endeavouring to prevent the passage of such as we believe will either ruin, or greatly injure us, than to express as publicly as possible, the objections which we have to them? To attempt this, whenever our interests are assailed, must be a part of my vocation, whilst I hold the office with which you have honored me; for the best imaginable instructions in regard to all the operations of husbandry, even were I capable of giving them, would be of very little use, comparatively speaking, unless the expected products of those operations were first secured against unjust and oppressive taxation in all its possible shapes and forms. Not that I have the vanity to believe myself particularly gifted with any extraordinary power to prevent such calamities; but a mere child, we know, can cry fire! loud and often enough to rouse those who are competent to save the house, when in danger. On this principle it is, that I again take this occasion to implore our agricultural brethren throughout the Union, to stand by each other hereafter, in a more public way, than they hitherto have done—*not to ask laws to the injury of others*, but to entreat, remonstrate, and protest without ceasing, against every attempt to pass such as may injure *themselves*, by whomsoever they may be either required or proposed. That in doing this, they will best secure, not only their own interests, but those also of the state, is very certain; for it is demonstrably true, that in every agricultural country, rescued from barbarism, and more especially in ours, where the great mass of agriculturists are both landlords and tenants, the landed interest and that of the state are completely identified. This fundamental truth has recently been so satisfactorily illustrated and proved by the justly celebrated Malthus, that it may now be considered a cardinal axiom in political economy.

Having adverted to the topick of "*instructions in regard to the operations of husbandry,*" I must finally request you to recollect, that I have hitherto said very little, if any thing, which can be considered as assuming this authoritative character. My motive for making this observation is, that the various communications which I have had the honor to make to this, and "The Virginia Society for promoting Agriculture," have excited, according to the information of several of my friends, many enquiries relative to my *own particular management*, as a farmer; the general inference appearing to be, that the man who writes much on the various topicks of rural economy, should be a good practitioner himself in most, or all of the various branches. If these gentlemen had taken the trouble to consider maturely, what I have deemed it my duty to write, they would have found, that I had devoted my attention *rather to the detection and exposure of errors*, than to *the recommendation of practices, which I had experimentally proven to be good*; and of course, that the legitimate conclusion, in regard to my own practical skill, would not *necessarily* be very favourable. Every day's experience will convince us, that the man who has suffered most from erroneous practices, will be much better able to explain and expose them, when once he has become so sensible of his faults as to resolve on reformation, (which is the chief merit I claim,) than he who was never guilty of any. For this reason it is, that those who have been among the worst managers themselves, are most capable of shewing in what bad management consists, as well as how it operates; of all which the good managers from the beginning, know nothing experimentally. The avoidance of evil, or the pursuit of good, should depend on the intrinsic merit or demerit of each—not on the number or character of their followers. If I have succeeded therefore, in persuading any of my brother agriculturists to abandon certain obviously pernicious practices which prevail among us, or to pursue others which they find to be beneficial, let them not think it necessary to pry too closely into *my own* proceedings in order to confirm their's, lest they should find that their lecturer depute, countenanced by many others in all professions, does not fully perform what he teaches; and lest they should compel him—like the disorderly parson, reproach for the disagreement between his precepts and his practice, to exclaim—Gentlemen, "*Do as I tell you, not as I do.*"

From the Massachusetts Agricultural Journal.

ESSAYS ON FLAX HUSBANDRY —*By S. W Pomeroy, Esq. first Vice-President of the Massachusetts Society, for promoting agriculture.*

ESSAY II.

CHANGE OF SEED.

Notwithstanding it is an opinion well established among experienced flax growers in this country, that a change of seed is advantageous, it is apprehended that they are not aware of the extent of the benefit to be derived by selecting seed from a soil or climate essentially different; and it may be owing to a want of attention in this particular that the flax crops are so uncertain, and the quality inferior, however perfect in other respects the system may be conducted. Mr. Young observes, that "foreign flaxseed was universally used in Ireland, when it could be obtained, otherwise they were careful to procure seed which grew upon a soil of an opposite quality from that which was to be sown," that "American seed was preferred, and produced finer flax than any other. Baltic seed produced more, but of a coarser quality." It is well known that American seed always bears the highest price in the Irish market.

We next look to *Flanders*, where flax was cultivated at a period as early as the commencement of the Christian era.(6) Fortunately we are furnished with "directions for cultivating flax after the Flanders method" published by commissioners and trustees appointed by the British government to promote the Linen trade in Scotland, at the head of whom was the celebrated Lord Kaims—from this high authority we find that it was the practice "to sow seed imported from Riga, if it could be obtained, otherwise the produce of Riga seed sown in Holland, and if that could not be had, that which Riga seed had produced in their own country, being careful to choose that which had grown on soils of a different texture and quality. What is the practice in Germany, where the cultivation is very extensive? By a respectable British publication, now before me,(7) in which an account is given of the trade of Stettin, a city of Prussian Pomerania, situated near the mouth of the river Oder, it

(6) Pliny's Nat. Hist: Book 19.

(7) Commercial and Agricultural Magazine, vol. iii. 1800.

appears that the extent of the linen trade is estimated by the quantity of flax-seed *imported*—and it is stated that on an average of ten years preceding 1796, twenty-one thousand six hundred and forty-five tons of flax-seed were annually imported into that port to be sent up the Oder and the waters connected with it, which, at 40 bushels to the ton, amounts to upwards of 800,000 bushels! sufficient for half a million of acres at the rate it is sown in this country! and it is not improbable that large quantities are imported into other ports connected with the large German rivers.

Foreign flax-seed was sought after even in the remote vallies of Switzerland, as appears by the following extract from a treatise on the culture of flax by Mr. Tschiffeli, president of the economical society of Berne. "In general the best flax seed is produced on strong soils and in cold climates. Experience has long convinced us that what is brought from Livonia" (Riga seed) "is to be preferred to all others, but when this cannot be procured, we must make use of that which grows on our own mountains, for instance Gessenaria, Jura," &c.

A Flemish colony first settled the island of Fayal, and introduced flax. They have become amalgamated with the Portuguese, but the culture, and manufacture of linen in families, has continued to an extent nearly equal to the cloathing and general consumption of a very dense population. The soil is mostly in tillage and from its elevation admits of a variety of aspect and temperature, and great care is bestowed on the culture of *flax*. I have been informed by Mr. Dabney, the United States consul for the Azores, who has resided fifteen years at Fayal, that in several instances, American seed, obtained from ships bound to Ireland, arriving in distress, has been sown; and the product in *flax* and *seed*, has been fifty per cent. more than from that of native growth by the side of it! We have no information to this point from Russia or Italy—but it is believed that examples enough have been cited to shew the importance attached to this branch of the system in Europe, and to justify the conclusion that in this country a continued, judicious change of seed will be indispensible to the successful prosecution of flax husbandry; and a further inference may be drawn, that experiments on various soils with seed the growth of different climates, are requisite to direct the farmer to the quarter from whence his best seed may be obtained.—Here opens a legitimate field for our numerous agricultural societies to labour in; on their exertions the farmer must depend in the outset; but let it once be ascertained that Riga seed is best in one section, Dutch, or German in others, and mercantile *interest*, if not patriotism, will soon distribute them.

Should it be objected to importing seed on account of the expense, we reply, that large quantities of linseed oil are constantly imported, and the difference of price between our own seed and that imported, will not much exceed what is now paid for good clean seed for sowing or export, and that which is sold for crushing—but if it is fifty cents per bushel, or more it can be no object, compared with the advantages that may be reasonably expected to result —and the farmer need not be told, that, "in all his operations, *parsimony* is never so ill judged, as when exercised in the selection of his seeds." It is not pretended, however, but that, from the great variety of soil and climate in the United States, the object in view might be obtained without importations—yet it may be important to have a good stock to begin with, when trials could be instituted with its produce; at any rate it cannot be expected that individuals will embark in such a course of experiments, either with foreign or domestic seed, unless encouraged by agricultural societies or other public bodies.

SOILS.

The subject presents a character of such national importance, that a wider rage must be taken than views of mere local interests require—we shall therefore first examine, under the present head, the different sections of our country. *New soils* are found most favourable to the growth of the flax plant—and it is scarcely necessary to mention the vast fertile tracts on the *western waters*, as capable of producing immense quantities.

The State of Maine has a soil and climate, that appears highly congenial to flax culture.—The extensive tracts of strong carbonaceous soils, particularly those denominated "*black lands*," and the almost total absence of drought, will enable that state to possess a staple in this article, not inferior in value to any, except grazing, whenever the energies of her population shall be directed to it. The rest of New England, that part of New York not included in the first description, and New Jersey, have bodies of land suitable for flax, quite sufficient to be embraced in the system of agriculture best adapted to their situation. Pennsylvania probably grows more flax than all the other states in the Union.(8) The Atlantic sections of the states, south of the Delaware to the cotton latitute, possesses considerable tracts of alluvial soils, bordering on the numerous rivers, creeks, bays and inlets, with which they are intersected; a portion of them, besides swamps, may be reclaimed without great expense; they have also bodies of strong clays. Should these be too much exhausted by severe cropping, they may soon be restored by the admirable clover system adopted by Colonel Taylor of Virginia, and made to produce good flax—as it is probable, from the early period the ground may be sown, that the crop would be seldom injured by the droughts, to which the climate is subject.

The soils which rank first in this country are the fat bottoms, that are covered by the fall and spring floods which subside early enough in the season to get in a crop; those river flats on the second banks, that have a depth of strong alluvial soil; the reclaimed marshes and swamps with a black unctuous soil, not too peaty, with as much clay in the composition as will permit its being rendered soon dry and mellow, and not retain water on or near the surface; if it stands two feet below, so much the better, but must be well guarded by ditches and dykes against sudden freshets. Such is the soil of the province of Zealand, where more flax is raised, and of better quality, than in any other part of Holland. The next in estimation are the strong black loams on clay, or hard pan that will retain moisture. Yellow loams, with a holding subsoil, may be rendered suitable for flax by proper cultivation; and since the discovery that plaster of paris is an excellent manure for it, a crop may be obtained with much more certainty on lighter lands than formerly. Perhaps the characteristic of best *garden mould* may be applied to a flax soil, viz. *retaining sufficient moisture, and all that falls, without ever being saturated*; but on any soils the surface should be completely pulverized, and never worked when wet.

(8) By the returns of the Marshals in 1810, there was manufactured in the United States 800,000 dollars worth of *Linseed Oil*—500,000 dollars of which was made in Pennsylvania, and 200,000 dollars in N. England. See Cox's statement.

MANURES.

No dung should be applied to the land when the flax is sown, but may be put on bountifully with the previous crop. The objection is, that dung forces the growth so rapidly that the plants draw up weak, have a thin harle, and are more liable to lodge. Lime, marle, shells, leached ashes, &c. do not produce such effects. *Top dressings*, soon after the plants appear, of plaster, ashes, soot, &c. are highly beneficial, as they not only encourage the growth, but are a protection against *worms* which sometimes attack the young plants, and may be considered the only enemy they have, except weeds.

Salt has been mentioned by the late Doctor Eliot, of Connecticut, as an excellent manure to plough in with flax at the rate of five bushels to the acre;(9) probably more would be better. Plaster is now much used in Duchess county, the best cultivated district in New-York, as a manure for flax, on which its good effects are as apparent as on corn.

The late chancellor Livingston viewed a piece of flax on the 20th of May, 1791, belonging to a poor tenant, very injudiciously sown on a dry sandy declivity, it looked so extremely sickly that the tenant thought of ploughing it up—the chancellor gave him three bushels of *Plaster*, which was sown the next morning before the dew was off, and had the satisfaction of seeing his tenant gather more flax from this half acre in an uncommon dry season, than was produced from any acre in the neighbourhood.(10)

PREPARATION OF THE LAND.

It is not unfrequent in Ireland to obtain crops of flax from green sward, on which they put lime, shells, limestone gravel, &c. and break up in the fall, cross ploughing and harrowing fine in the spring—but it most commonly succeeds a crop of potatoes which receive the manure. In Flanders, *Hemp* was formerly more used as a preparation for flax than since the introduction of potatoes. In Italy it commonly precedes flax, and although the land gets no tillage, as the hemp is well manured it grows strong, and is then a powerful destroyer

(9) See Eliot's Essays on field husbandry.
(10) Transactions of Agr. Soc. New-York.

of weeds. In England, on some of the *fen soils* of Lincolnshire, &c. the usual course is *Hemp* two or three years in succession, well manured, then flax without manure—a crop of *turnips* is often taken the same season after the *flax*, and *hemp* succeeds again. In Russia it is stated that extensive crops of *flax* are drawn from new cleared lands after burning them over, and harrowing in the seed with the ashes. The best preparatory crops in this country, at present, appear to be *potatoes*, *corn* and *roots*; they will most generally repay the extra manure, and if well managed check the production of weeds.

The following *rotations* may serve as an outline subject to be varied, and *hemp* or other crops introduced as circumstances require, viz :—

No. I.—Low, cold, or reclaimed soils.

1st year. *Potatoes.*
2d do. Flax with seeds.
3d do. *Herds grass, (Timothy)* and *red top* or *tall meadow oat grass*, to continue three years or more, and the course repeated.

No. II.—Strong Uplands.

1st year. *Potatoes* or *Corn.*
2d do. *Corn* or *Roots.*
3d do. Flax with seeds.
4th do. *Clover.*
5th do. *Orchard Grass* or *Herds Grass*, to continue three years or more

No III.—Light Lands.

1st year. *Potatoes* or *Corn.*
2d do. *Corn* or *Roots.*
8d do. Flax with clover seed.
4th do. *Clover* to be mown once, the after growth to be turned in and *Rye* sown thick on the furrow, which may be soiled or fed in the spring by sheep or milch cows, and ploughed in for
5th year. *Corn.*
6th do. *Spring Wheat* or *Barley.*
7th do. *Clover* and the course to be pursued as before, when flax will occupy the land every seventh year. In all cases, except when hemp is substituted, the tillage crops should receive the dung.

If the land is ploughed into beds, or convex ridges like turnpike roads about a rod wide, especially if low and level, the crop will be much more secure from injury by heavy rains, and the grass crops will be better if it remains in that form. On any soils, fall ploughing in narrow ridges will facilitate its early working in spring, and should not be dispensed with.

(To be continued.)

Petersham, Oct. 2, 1820.

ON THE PRESERVATION OF FRUIT TREES.

Sir—Should the following communication respecting the preservation of fruit trees from decay and premature old age, appear to be entitled to notice, you will oblige by presenting it to the Trustees of the Society.

Several years ago I owned a tanyard on the bank of a pond, raised by a dam across a small rivulet, which passes through my farm in Petersham. Some of the tan, after it was taken from the vats, was occasionally thrown into the pond. I noticed from time to time, that the fish in the pond died. I was induced to believe, that some deleterious property in the tan produced the effect on the fish, and that it might be converted to some valuable use in agriculture.

At that time, from various causes, many of my fruit trees, and particularly my pear, peach, and plum trees, were in a state of decay. For the purpose of an experiment, I applied a small quantity of tan to the roots of my decayed trees; the result exceeded my most sanguine expectations. The trees began to revive, and the next season I made a similar and more extensive use of my tan about my fruit trees; and the result has been obvious in all, but more particularly in my pear, peach and plum trees, which are the most liable to decay in this section of the country.

Tan about the roots of trees, loosens the earth, and prepares it to receive and communicate greater quantities of nutriment to the trunk and branches. The tree is thereby invigorated, and acquires more strength to resist any disease, by which it may be attacked. But the most beneficial effect of the use of tan is to prevent the approach of all kinds of insects, which prey upon the very life of the tree. My fruit trees, which have been prepared with tan, have been wholly free from the ravages of caterpillars, canker-worms, grubs and every kind of insects; while others, which stand near by, and which have been neglected, have been more or less injured by these common nuisances, *too common* in fruit orchards, through the careless neglect of the husbandman. Tan also prevents the black gum from oozing from the trunks and branches of fruit trees; which is more frequently the case in damson, plum, and peach trees, than in any other, arising from the constitutional weakness of the tree, or from some other cause, which is prevented by the application of tan. This was the state of my trees, and of those of my neighbours, before I made the experiment by using tan. The result is obvious and notorious to all, who examined the trees at the different periods. My trees are healthy and flourishing and vigorous, while those of my neighbours, who have neglected the use of tan, are either dead or in the last stages of decay. My fruit has not only been greatly increased in size and quantity, but its flavour has been much improved and enriched.

A remarkable instance of the wonderful effect of tan in restoring decayed fruit trees to health and vigour is observable in a pear tree, which stands in my garden. Six or seven years ago it was almost lifeless. It had but one or two small green branches on it; the rest were entirely dead and dry. I was induced to try the effect of tan upon it, but with little hope of success. In the course of two or three years I was astonished to see new branches shoot out from its trunk; and it is now the most flourishing fruit tree on my farm. This fact can be attested by hundreds.

It has generally been my practice to renew the tan about the roots of my trees once in two years. It may possibly be expedient to renew it annually, as soon as the snow has been dissolved from the roots. I have usually appropriated from half a bushel to two bushels to each tree, according to its size. It may be carelessly placed around the trunk of a tree; and it will soon spread itself to a proper distance over the roots.

I feel the most perfect conviction of the sure and certain effect of tan in restoring decayed fruit trees to health and preserving them to vigour. Should any one, however, entertain doubts, the experiment may be easily made, with trifling expense, particularly by those who live in the neighbourhood of tan yards. Tan has been esteemed useless, after it has been thrown aside by the tanner. Any one, who will ask, may receive without fee or reward.

JOHN GATES.

Petersham, Oct. 2, 1820.

We have seen and examined the fruit trees of Mr. Gates, a respectable farmer of this town. We are satisfied that his statement respecting the effect of tan, in restoring decayed fruit trees to health, and preserving them in a flourishing state, is correct. Mr. Gates has paid great attention, in improving his fruit trees, and we have no hesitation in saying, that we have no doubt that his discovery of the good effect of tan, will be most valuable to the community.

HUTCHINS HAPGOOD.
JARED WEED.

FOR THE AMERICAN FARMER.

TRIMMING OF HEDGES.

This is the favourable season for the purpose, where they *have been annually* shorn or trimmed of their superfluous shoots.

When the Thorn shrub was taken from its native forest, for the purpose of becoming useful to man, what was its character but that of a forbidding prickly shrub, armed with all its defensive weapons and original deformity; and whose sharp pikes and strong armour, rendered it painful to the touch, and seemed unsocial to animated nature, and scarcely fit to be admitted to a place in the forest, without offence to the neighbouring tribes of the vegetable community? —Yet when taken under the care and guidance of man, becomes *eminently* useful and subservient to his purposes of forming a *Hedge*—a safe and durable, as well as ornamental enclosure for the safe keeping of all the valuable, and most delicate productions of his labours of the field, an object of high importance to most of his pursuits of the art of Husbandry. What would it avail to plough and sow, and make every necessary preparation for a crop, and leave his soil unprotected for want of an inclosure that may be relied on?

The frailty of a wooden fence, daily declining to decay and dissolution, too often teaches, by sad experience, the consequence of labour lost for want of a better security against the depredation of prowling animals, seeking for opportunity to satisfy their craving dispositions.

As before remarked, this is the proper time for reducing the form of live fences, by clipping and trimmig all the superfluous branches, in order to form the fence into the character of a hedge, more especially if it has been previously kept trimmed, as the annual shoots are always tender and easy cut at this early season, (the first of June). I have just completed all the trimming of my hedges, and from the uniform appearance they now exhibit, I am led to invite the farmers' attention on the subject; especially those who have embarked in the project of hedging —they ought to recollect the importance of having a *hedge* instead of a *hedge* row. I cannot with justice to the subject, apply the name of hedge to any thing short of a trained one, and that kept in some sort of regular order. If it is suffered to run into a wild or original state, after planting even in rows, it no longer deserves the appellation of hedge—it is daily approaching to the original condition—it towers aloft, with its branches affording and inviting the birds of the forest to perch on its branches, as they cross the fields—it forms a convenient resting place, and at the time of their feeding on the fruit of various productions, that are well suited to their distribution, they are sure to leave a portion of the seed dropped amongst the thicket of such hedge rows; and being so completely protected by the branches, it soon becomes a nursery for most of the pestiferous products of the farm —therefore no longer entitled to the true character of a *hedge*. According to my idea and acceptation of the term, none but trained and trimmed live fencing, deserves the name of Hedge.

Lately having had a visit from one who has been a number of years in the cultivation and propagation of various kinds of thorn, but had been partial to the forming of hedges on the upright plan *without* laying or *plashing* the stock. And had not seen any of the Virginia kind treated in that way, although he had been cultivating them several years—when he viewed the *plashed hedge regularly trimmed*, about fifteen years old, that never had been suffered to rise above five or six feet high, with an impenetrable body from the ground up, and covered with an abundant coat of leaves, it satisfied his inquiring mind so effectually—he emphatically expressed his conviction of the utility of the practice.—(Althongh I had often previously reasoned with him on the subject) his judgment I found was never convinced until occular demonstration decided the question—and since in recommending it to one of his friends, (a farmer) he endeavour-

ed to convince him of the propriety—by saying the question is forever decided in my judgment.

As those little incidents are so intimately connected with the subject of this essay, I could not in justice omit them, and more especially as they dropped from one whose discriminating powers of research, entitled his judgment to an elevated rank of respect.

His next inquiry was concerning the duration, or rather my *opinion* of their continuance in that desirable condition—in their native state, I have been able to trace them back, half a century under my own observation, without decay—and from other sources of information from Europe, three hundred years, and one case of six hundred—see the first volume of the American Farmer. Now whether the trimming will have any effect to shorten durability, remains to be examined—so far as I have observed, there is nothing to fear on that account, (although I have been cautioned about summer clipping) I have seen no bad effects from five or six years practice, and the two last excessive dry, and was a month later in effecting the business—this season they are remarkably vigorous—neither was the first of my plashing done with that judgment and prudence of management, as the latter has been; too much crowded in the layers or stalks laid down, consequently a diminution of vigor in their future growth—our late plashing has been much better managed. and the trimming commenced at an earlier period of growth, as they gradually enlarge by cutting a little higher every time they are cut—this occasions an advance in height, a little every year, until they finally have to be headed down into the older wood, which causes a little more labour. That was the case with some of mine this year, particularly one that was neglected last year, and did not get any taken off- this season it was headed as low as needful—It causes an unsightly appearance until covered by a new foliage. which a few weeks will furnish by young shoots again.

Like all other parts of the husbandman's charge, the hedge requires a continued care, and by training and trimming, it becomes subservient to his design, and assumes the true character of *hedge*—and it is the frequent and judicious application of the pruning knife, that gives it that appropriate name.

It is not the lopping down, after obtaining an ungovernable height and cumbrous growth, and leaving the severed stalks and branches to form a fence, until a new growth succeeds to supply the place of the former, (too prevalent a practice done in a slovenly manner) affording complete shelter for pestiferous products, to rise through the brush, that I deem to bear the name of plashing, or that deserves to be considered as hedging—yet the thorn seems to be provided with all the properties requisite, by the all bountiful Creator, to serve the good purpose of making a hedge *after* this treatment, by removing all extraneous matter, the young shoots from the old stumps, will form a stamina for a complete hedge. by giving it due attention—and train with judgment for the purpose, as former essays on this head. in the first vol of this paper will more fully point out.

It may be set down as an invariable rule, that trimming is as essential to the having a good hedge, as well as planting, but it is evident that many have planted, and ever after have neglected any further labour, whether from choice, or because they are capable of taking care of themselves. as their appearance seems to indicate such a conclusion, I must leave, but the case is, they will never have good hedges without trimming.

Mine, as well as some others in the neighbourhood, are now ready for inspection—those who feel so much interest on the subject, as to give themselves the trouble to examine for themselves, may from occular evidence, settle the question in their own way—by seeing them.

CALEB KIRK.

Brandywine, Delaware.

To the Editor of the American Farmer.

HEDGING IN GEORGIA.

The subject of hedging will soon become very interesting to the farmers and planters of the states of South Carolina and Georgia. Timber yet abounds in these states for the common purposes of fencing and building. But it can easily be seen that this abundance will not long continue under the wasteful management pursued in the use of fencing timber.—Some substitute for worm, or post and rail fences must be used, and the earlier this substitute is determined upon, the more expeditiously will it be introduced, and the less will our valuable timber be wasted. I have made several efforts to propagate the red, and black and knotted thorns, very commonly called the red, and parsley haws, but without any success. I have failed in an endeavour to preserve within proper space, and to give proper consistence to locust hedges. The sword palmetto, sometimes called the bayonet bush, or royal palmetto affords a very sufficient, but perhaps a very dangerous article for hedging. The beauty of the plant is very considerable. It bears an extraordinary number of seeds—but from these, I have not been able to obtain plants; yet the plant itself is very tenacious of life, and will flourish if laid upon the ground without roots. The object of this communication, is to invite from some of your correspondents, a detailed statement of the most expeditious manner of propagating this valuable hedging plant.

Respectfully, your friend,
DAVID P. HILLHOUSE.

Wilkes County, Geo. 1821.

TO THE EDITOR OF THE AMERICAN FARMER

MARKS OF GOOD COWS, &c.

Dear Sir,

You gave us a modern description of a good cow, in one of your late papers—I now send you one from farmer Virgil. You may mark the difference, but it is worthy of observation, that the *milk* breed, and the *yoke* breed, to obtain the greatest advantage, are incompatible in the same animal, and we may say the same of the beef breed.

"The mother-cow must wear a lowering look,
Sour headed, strongly necked, to bear the yoke.
Her double dewlap, from her chin descends;
And at her thighs the pond'rous burthen ends.
Long are her sides, and large; her limbs are great;
Rough are her ears, and broad her horny feet
Her colour shining black, but flecked with white;
She tosses from the yoke—provokes the fight;
She rises in her gait, is free from fears,
And in her face a bull's resemblance bears;
Her ample forehead with a star is crown'd;
And with her length of tail she sweeps the ground."

P. S.—My own observations on good cows, lead me to the following marks. Incurved horns, a countenance rather serious, a clean bony face, a neat neck, a capacious body either in length, depth and rotundity, a bag extending along the belly, wide and large, teats not crowded, red or brindle, hair on a dark hide, a voracious and indiscriminate eater of all foods, and industrious whilst on a thin pasture, seldom laying down. These last traits are very important.

If it does not make my postscript too long, you might insert Camerarius's description of the qualities admired by the ancients in a horse. The breast broad, the hips round, and the mane long, the countenance fierce and somewhat resembling that of a lion, the nose similar in form to that of a sheep—the head, legs and skin, of a deer. The throat and neck of the same form with these parts of a wolf—the ear and tail, of a fox.

A COUNTRYMAN.

We have improved in many departments of husbandry since the days of "farmer Virgil," and it would be strange if we had not improved our knowledge and breed of cows. We doubt if one of Virgil's cows, with her *sour*-head! great limbs! rough ears! bull face! &c. would take a premium at our next Cattle Show. EDITOR.

ECONOMY OF FUEL.

Persons who burn wood may make a great saving by pouring water on the ashes in the morning, and mixing them when wet, as you would mortar, then shaping to the size of a log—make the fire on the top, so that the ashes may answer for a back log. The ashes will burn and throw out an intense heat.

Those who burn coal may save one third by the following easy means: Let the coal ashes which are usually thrown into the dust bin, be preserved in a corner of the coal hole, and make the servant add to them, from the coal heap, an equal part of the small coal or slack, which is too small to be retained in the grate, and pour a small quantity of water on the mixture.—When you make up your fire, place a few large coals in front, and throw some of this mixture behind—it saves the trouble of sifting the ashes, gives a warm and pleasant fire, and a very small part only will remain unburnt.

Those who burn coal may adopt another method. In managing the fires during the day, first lay on a shovel of the ashes from under the grate, then a few coals, more ashes, and afterwards a few more coals. and thus proceed until the grate is properly filled, placing a few large coals in front. It will be found that ashes retain the heat better than coals alone—you will have less smoke, a pleasant fire, and a very little waste left at night.

The contents of the common snuffers may be used as tinder for lighting matches, &c.

The following ready mode of mending cracks in stoves, pipes, and iron ovens, may be considered as connected with the economy of fuel. The crack may be closed in a moment with a composition of wood ashes and common salt, made up into paste, with a little water, and plastered over the crack. The good effect is equally certain, whether the stove &c. be cold or hot.

ECONOMICUS.

For the American Farmer.

MANURE.

MR. SKINNER,

Of all the crops which a farmer raises, the crop of the farm yard is of the most importance. If I had plenty of manure, I should better know the value of a good plough, and might then easily find a profitable crop—whereas, on a poor farm, what is the use of a plough that two horses may easily draw eight or ten inches deep,

when you dare not plough half the depth, unless indeed, you are able to live without the produce of your farm for five or six years—and what is the use of telling us of root crops, of which we may raise from four to eight hundred bushels to the acre on ground casable of producing forty or fifty bushels of corn, when you have not an acre on the farm that, with all the manure you raise, will produce twenty-five bushels. Some of your correspondents pass the word *manure*, when they have occasion to write it, as perhaps they do the thing—hold their breath and speed on—they pass it as if it was not to be increased or diminished by the attention or neglect of the farmer. I wish some of your correspondents would leave their opinions about the difference of implements, in which there is no difference—save, in prejudice, and give some details respecting the management and application of farm yard manure —When I have reaped the fruits of these opinions, I shall read the others. Many farmers of poor farms would be glad to have the following questions answered minutely :—

How many loads (cubic yards) of long manure may be expected, by the best possible attention, from each head of grown cattle, in the order generally kept on a farm, regularly confined, except during the grass season, and then at night? What number of hogs will make as much manure as a common cow? What is the best possible attention? And what proportion per centum, will the rotted bear to the coarse, or unrotted manure?

A YOUNG FARMER.

THE CUT WORM;

IT MAY BE BANISHED FROM OUR FIELDS BY A GIVEN COURSE OF CROPS.

TO THE EDITOR OF THE AMERICAN FARMER

Westland, June 21, 1821.

DEAR SIR,

In consequence of Mr. Minor's letter which I have this moment observed in the 12th No. of the American Farmer, requesting information on the subject of the *cut-worm*, (that formidable enemy to the corn crop) I feel it incumbent upon me to furnish the following facts—

Until the year 1809, I had frequently sustained, in common with my neighbours, very great injury from the ravages of the cut-worm —at that time I commenced a regular six field rotation of crops, in the following order—wheat; corn; fallow; wheat; clover; clover; which seems to be the system intended to be adopted by Mr. Minor in his contemplated change of rotation. Since this plan has been in operation on my farm, I have never once been assailed by the cut-worm, while they continued to desolate contiguous fields with the most destructive and ruinous effect. So far then as the experience of twelve years may be considered as a sufficient test. I am warranted in recommending with confidence, the above system as an effectual preventive of the momentous evil so justly deprecated, and forcibly depicted by Mr. Minor. There is a circumstance however, which has occurred, which, though not strictly comprehended by the terms of the enquiry which I have deemed it my duty to answer, yet seems so intimately connected with the subject, that perhaps it ought not to be omitted in this detail. In the year 1815, my crop of corn was laid waste and literally destroyed by what is here denominated the *rich-worm*—its ravages commenced with the coming up of the corn, and continued as long as there remained a plant to operate on, and I persisted in replanting and plastering until harvest. This worm is essentially different in its external form and colour from the cut-worm, it being a short, thick, white animal with a black, or dark coloured head. This is the only instance in which my corn has received injury from any species of worm, since the adoption of my present system of rotation—the same field is now in corn, and promises remarkably well being wholly untouched by the worm.

Mr. Minor is of opinion that "none but strong lands will sustain a course which then throws the three grain crops together in succession." I am certain that mine have not deteriorated by its prosecution for twelve years, during which time too, I have grazed considerably and been culpably negligent of all kinds of manure except plaster. Your land is in corn only once in six years, in wheat twice, and the balance of time in clover. One admirable tendency of the foregoing system is the suppression, if not extirpation of blue grass, an adversary more troublesome and potent than almost any other encountered in the operations of husbandry.

With esteem and respect,
I remain Dear Sir,
Your's truly,
HENRY S. TURNER.

Extract of a Letter from Maj. T. Emory.

"The Committee who awarded a premium for my Bull Calf, has not exactly quoted my description of his blood, as left with you previous to the show. He is largely in the *Irish*, imported by O'Donnell, and one-fourth in the breed owned by Gov. Wright, imported many years ago by Court & Co. Annapolis—and which, from their characteristics and appearance, very much *resemble* the Holderness. The error, which arose no doubt from inadvertance, consists in speaking positive of the Holderness cross. This Calf, at 16½ months old, was weighed by your neighbour Hook, at his hay-scales, and weighed 874 lbs."

FOR THE AMERICAN FARMER.

REMARKS

On Tin, Slate, Shingle and Thatched Roofs.

In No. 4, of the American Farmer, a correspondent from Middleburg, inquires respecting the cost of a tin roof. I cannot give the information, but I can tell him what will form a much better roof, and in the end, I apprehend be as cheap as tin. I mean slates, which are now always used in this city, by those who are desirous of guarding against the danger of fire from external causes. Slate, moreover, is an article of home production; tin is not, and notwithstanding the disregard with which gentlemen to the south affect to treat such hints—it nevertheless is true, that it is the interest of every one to use home products, in preference to foreign manufactures and foreign articles generally. Attention to this point is becoming more and more necessary every day, for the precious metals are vanishing so rapidly from among us, to pay European debts, and to buy European and Indian superfluities, that in a short time unless we alter our conduct, a dollar or an eagle, will be as rare as during the American war. A letter directed to Mr. Griffith, (Slater) Philadelphia, will meet attention, and the cost of a slate roof, may from him be accurately ascertained.* I would advise your correspondent in preference, to come to Philadelphia, in order to see the slate roofs that have been put on many houses and public buildings. J. M.

* For such an estimate, we would feel ourselves on behalf of our patrons, greatly indebted to whoever would obligingly furnish it for publication. The slate roof is no doubt more durable than tin would be, and we would hope that its first cost may be cheaper; *and if this be the case*, as the article abounds, and is easily worked, we think that the fact need only to be known, in order to guarantee its more general use, and that too by our southern friends. But if we were to *adopt*, and felt disposed to push *the argument of our respected correspondent hôme* upon this portion of our fellow-citizens, we might feel ourselves constrained to advise the most of them to use shingles or straw. Upon the modes of thatching we may offer a few remarks at an early day, which we believe would be useful to those who prefer, or who are compelled, to make such roofs. EDITOR.

Communicated for the Telescope.

COLUMBIA, S. C. June 18.

Mr. CLINE,

Sir,—I received a few days since, the following method of destroying weevils in flour, wheat, rice, and other grains, either in the barn or in barrels, of preventing or curing the rust in *wheat* or in *cotton*, which the writer says positively is owing to small insects; and also for destroying rats in barns, granaries and elsewhere.

This was sent to me as Chairman of the Board of Curators of the S. Carolina Agricultural Society, by Mr. Jas. M'Lain, of York district, South Carolina, and he very liberally allows me to publish it as often and in any manner I please.

Mr. M'Lain says, that the rust in wheat is occasioned by small yellow worms, to be found mostly in the hollow of the stock between the top joint and the head; they are so very small that they can scarcely be seen by the naked eye.

The rust in cotton is caused by multitudes of insects on the underside of the leaves.

I am well aware that sulphur has been frequently recommended for the above purposes; but whether it has had a full trial is doubtful, particularly in the manner and time of using it as directed by Mr. M'Lain, viz: by making matches of the brimstone or sulphur, and sticking them after being lighted, in the field infected by the insects *between day-light and sun-rise*, when the air is still and the dew on the plants. This being done for three successive mornings will destroy the insects, and restore the wheat and cotton to perfect health and vigour. Now it is very possible that the smoke of the brimstone impregnating the dew on the plants may have a better effect than if used under other circumstances.

One pound of brimstone is sufficient for ten acres each morning of wheat or cotton.

To preserve wheat, rice or other grains, and flour in barrels from weevils and worms, wet the inside of the barrel and turn it down over a burning match; let it stand about ten minutes, take it off and put in your wheat, rice, flour, &c. immediately.

To preserve corn, &c. in cribs and granaries from rats, weevils, &c. dig holes sufficiently large to contain a match of the sulphur of brimstone and let it stay about thirty minutes.

When we consider the enormos ravages and the great destruction caused to farmers, cotton and rice planters, merchants and others, by insects and rats, it excites surprise that certain means of destroying them have not yet been found out, or very fully and repeatedly tried. Should the sulphur, used according to Mr. Jas. M'Lain's method, prove effectual, his name deserves to be handed down to posterity with the highest honor and praise for the liberal and disinterested manner in which he made the communication.

I am, respectfully,
Sir, Your's &c.
N. HERBEMONT.

CHEROKEE ROSE.

COLUMBIA, (S. C.) June 5th, 1821.

John S. Skinner, esq.

DEAR SIR—On looking yesterday over the *second volume* of your very useful paper, the "American Farmer," which I have received a few days since, I noticed the paper of the 2nd of June, 1820, a communication signed Charles P. Rowand, giving an account of a "New and beautiful species of Hedge." I have not seen Mr. Rowand's hedges; but I have heard of them, and I know that the plant it is made of, is most invaluable for this purpose. The common name is "Nondescript," also "Cherokee Rose," and its botanical name is "Rosa Lœvigato," not "Rosa Multiflora," as Mr. R. has suggested. It is a native of the state of Georgia. I can send you a few of the hips of it if you wish. The raising it from the seed may be an advantage to the accustoming it to your climate. The "Rosa Multiflora" would, no doubt, make a beautiful hedge; but its thorns being much smaller than those of the other, it could not, so effectually, answer the desired object. If this error has not yet been corrected, it may not be unnecessary to do so. It is much to be wished, that the real botanical names, when they can be found out, be always used in publications relative to plants recommended, or mentioned for agricultural, medical or other useful purposes.—The want of such a name has caused many disappointments and discussions with regard to the Italian "Lupinella." Whereas, if it had been mentioned by its botanical name "Hedysarum Onobrichis," any person, by referring to a botanical book, could have learned that it is the Saint-foin.

The use of common or vulgar names, lead sometimes into errors that may be fatal; for the same plants in different countries, or sections of the same countries, are known by different names, and it very frequently happens, that a name is applied to a plant here, which, in another place is given to one, differing in every respect. I remember a very remarkable instance of a mistake of this kind; a young physician of this state, who had taken his degrees in Philadelphia, and had attended the late Dr. Barton's course of botany, speaking of the medical virtues of many of our native plants, spoke, after Dr. Barton, in high praise of the root of the "Podophillum peltatum," called in Virginia and elsewhere, by the name of May-apple, as a good substitute for jalop or ipecacuanha, I do not recollect which. In the course of his practice he had occasion to use this medicine when it could not be procured, took the root of a plant known in this state also by the name of May-apple, the "Passiflora cœrulea," which is very common, and a very troublesome weed in our gardens and fields; but is a totally different plant. If the root of the Passiflora had the desired effect, it must be attributed to a very uncommon chance, and it is as probable, that in other mistakes of this kind, plants of a very poisonous nature might be used. Also, when a patient is in pressing need of an active medicine, the substitution of an inert dose might be attended with serious consequences.

I know that every farmer cannot be a botanist; but I think he might be accustomed by degrees to botanical names, having them frequently, or occasionally under his eyes.

If you think any good can arise from the publication of this, you are at liberty to insert it; if not destroy it. I am very respectfully, dear sir,

Your obedient servant,
N. HERBEMONT.

GROUND BONES AND OYSTER SHELLS

USED AS MANURE.

To the Editor of the American Farmer.

George Town, 11th June, 1821.

I observe in your "Farmer" of the 8th, a correspondent wishes to be informed, whether any experiments have been made in *Grinding Oyster Shells* to be used as a manure, instead of burning them into lime.—Some years ago, I remember a gentleman telling of a field of corn he had, and that it had been in corn every year for a number of years—that the field was directly on the bay, where there had been an Indian town, perhaps before the settlement of Virginia—that the whole field appeared like a bed of oyster shells—some rotting, some not, and many crumbled to pieces—that after a smart shower, where it had been ploughed, you could see nothing but shells and parts of shells, and that he thought that the more it was cultivated, the better it was.—I had heard of bones likewise being used as a manure.

I had, therefore, determined to make the experiment, below stated—A tanner's mill near me had been idle for a year, or more—it had a stone floor, and iron coggs to a heavy wheel of the old fashioned form.—I collected all the bones I could, and ground them as fine as I could—and about forty bushels of oyster shells—they were as small as a quarter of a dollar; none larger, but a great deal of it very fine.

In 1817, I spread the bones, about 30 bushels over the tenth part of an acre, and 40 bushels of ground oyster shells over the same quantity of ground, and manured as much more—The rest of the ground was not manured—it was a small lot in good heart. That part manured with dung, was by far the best corn—that with bones, next best, but very little better than the shell manured land, which was no better than the other part of the lot. In 1818, it was in oats and clover—the quantity of the oats I forget, but the clover failed. In 1819 it was in corn again, without any more shells, bones or manure--it was ploughed and harrowed twice each time before it was plastered, and worked five times, afterwards; the part manured with bones, shells and stable manure, were all equal and very fine, perhaps at the rate of 8 or 9 barrels per acre, when the other was about 5 barrels. In 1820 it was in oats and clover—this spring I manured the whole (except what had been manured before) with the dung, bones and shells, with stable manure—the clover is now very fine but really the parts which were manured with stable manure, bones and shells in 1817, are by far the best covered with clover—and my impressions are, that when the same field is worked again, that the part manured with shells and bones, will be better, as the operation of the plough will detach sundry parts, now inactive from the bones and shells, and bring them into operation.

THE FARMER.

BALTIMORE, FRIDAY, JULY 6, 1821.

A great number of articles, various and valuable in their nature, have accumulated on our files.

In our next we shall present the remaining part of Mr. Pomeroy's essay on flax husbandry—Mr. Law's address to the Agricultural Society in Prince George's County—Some extracts from the proceedings of the United Agricultural Societies of Virginia; and probably a graphical description of the beautiful estate of W. S. esq. on the road from Winchester to Staunton, with an account of its products, management, &c. Also a letter from Thomas Marshall, esq. of Oakhill, Virginia, in reply to Mr. Minor, on the subject of the cut worm—and as many others as we can find room for.

The ease with which agricultural correspondence may be maintained, through a common medium, such as this journal, between gentlemen who could not otherwise interchange experience, is happily exemplified in this number.

A few weeks since a gentleman in Orange county, Virginia, takes occasion to deprecate the ravages of the cut worm, and to throw out some reflections and enquiries, as to the most practicable means of extirpating it—as soon as the course of the mails would have conveyed a private letter, he is promptly and cautiously answered, without any affectation or diffidence, by gentlemen in different and distant parts of the state.

It were needless to dwell on the laudable dispositions evinced in thus frankly interchanging opinions. The profitable tendency of such a temper amongst intelligent agriculturists, is self evident, and we are happy in the honor of having afforded the means of indulging it, as we are sure it will be attended with lasting benefit to the country.

PRICES CURRENT.

Flour from the wagons, $4 37½—Whiskey from do. 23 cts. exclusive of barrel—Hay, per ton, $17—Straw, do. 7 a $8—Wheat, White, 85 a 90 cents—Red, do. 82 a 84—Corn, 40 a 41, brisk sales—Oats, 27 a 30—Rye, 40—Cod fish, per quintal, wholesale, $3, retail do. $4—New-England Beans per bushel, $1 12½—ditto Peas, 75 cents—Plaster in stone $6 per ton—do, ground, $1 35 per barrel, 33 cts. per bushel, $8 per ton—New-Orleans sugar, $9 to 12 50—Muscovado, do. $9 a 12—American White Lead, $12 50—Ground do. 13 a 14—Linseed Oil, 75 cents—Feathers, 40 a 45 cents—Potatoes, per bushel, 62½ a 75 cents—Shad, new, $6—Herrings, $2 a $2 25, declining—Fine Salt, 55 cents per bushel—Ground Allum do 55 a 60—St Ubes, 60—Cadiz, 50 a 55—Turks Island, 75—Live Cattle, $5 a 5 50—Beef, 8 to 10 cents—Hams, 10 a 12 cents—Middlings, 10 cents—Butter, 25 cents—Peas 50 cents per bushel——Eggs, 12½ cents—Cheese 8 a 10 cents per pound—Tar $1 50—Turpentine, 1 87½ a 2—Pitch 2½—Rosin, common, $1¼, bright do. $3 per barrel—Varnish, 25 cents—Spirits Turpentine, 33 cents per gallon—Cotton, (good Upland) 14 a 15 cents; very dull—Rice 3 a 3½ cents—Ship and Flooring Plank, $25 a 27—shingles, best 6¾ a $7, common, $3 to 4½ per M.

Maryland Tobacco—Common crop, $3 a 3 50, plenty—Fine red, $6 a 10, scarce—Fine Yellow, $18 a 20 very scarce.

No sales Virginia Tobacco.